

NMED 2021 Rulemaking

Environmental Defense Fund Testimony

Hillary Hull

Testimony Overview

- Proximity Proposal
- LDAR Cost Effectiveness
- NMOGA LDAR Proposal

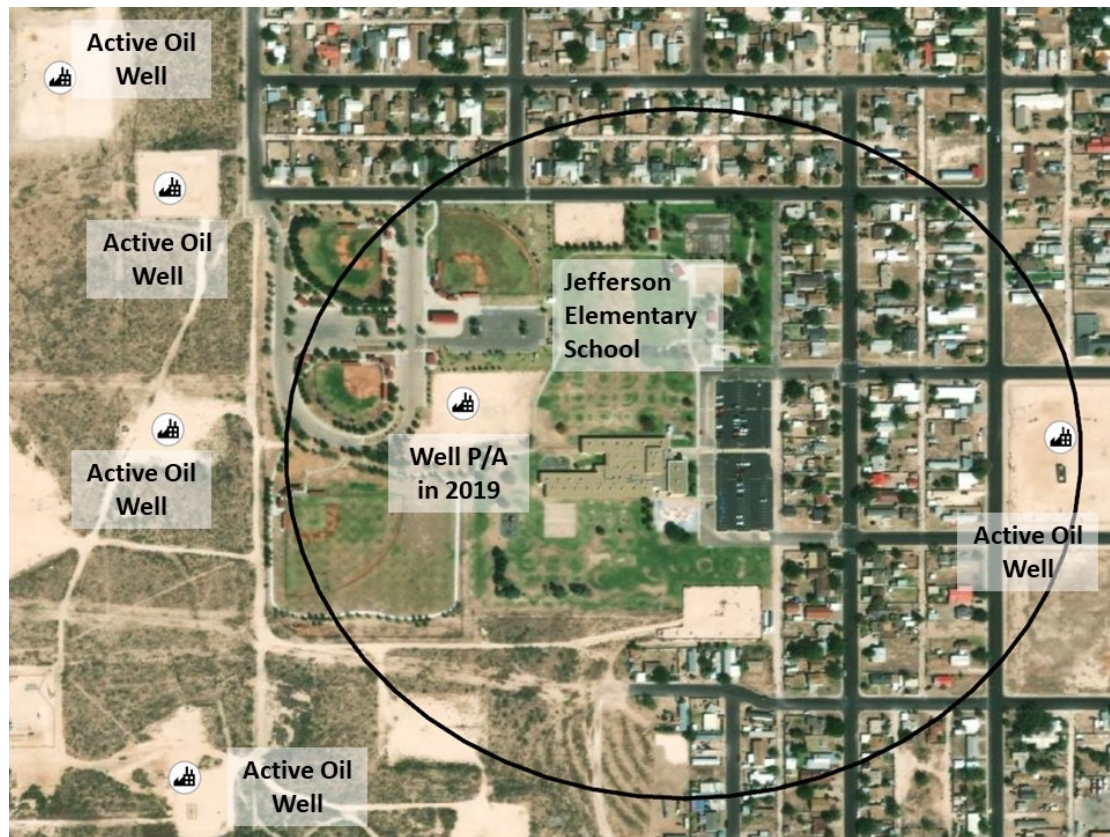
Summary of Opinions

- EDF has proposed to require more frequent leak inspections at occupied places such as homes and schools located within 1,000 ft of a well site:
 - Reduces additional 3,600 tpy VOC (14,300 tpy CH₄, 150 tpy HAPs)
 - Protects the health of over 35,000 New Mexicans
- We estimate NMED overestimated LDAR Costs by 30%
- NMOGA's estimate of the per well site cost of conducting semi-annual inspections is 286% higher than EDF's estimate
- NMOGA's proposal to decrease the frequency of inspections at well sites and compressor stations will result in thousands of additional tons of volatile organic compounds and methane emitted to the atmosphere annually

Proximity Proposal

EDF's Proximity-Based LDAR Proposal

- EDF proposes to increase leak inspections at well sites located within 1,000 ft of homes, schools and other occupied areas.
- PTE 0-5 TPY of VOCs → quarterly inspections
- PTE above 5 TPY of VOCs → monthly inspections



CO AQCC Definition of “Occupied Area”

“Occupied area” means

1. a building or structure used designed for use as a place of residency by a person, a family, or families. The term includes manufactured, mobile, and modular homes, except to the extent that any such manufactured, mobile, or modular home is intended for temporary occupancy or for business purposes;
2. indoor or outdoor spaces associated with a school that students use commonly as part of their curriculum or extracurricular activities;
3. five thousand (5,000) or more square feet of building floor area in commercial facilities that are operating and normally occupied during working hours; and
4. an outdoor venue or recreation area, such as a playground, permanent sports field, amphitheater, or other similar place of outdoor public assembly

EDF's Proximity-Based LDAR Proposal

- We estimate this will increase emission reductions by 3,600 tons VOC annually.
 - 14,300 additional tons of methane reduced annually
 - 150 additional tons of hazardous air pollutants reduced annually
- Supported by Climate Air Advocates, the Center for Civic Policy, NAVA education project, and Oxy USA

Thousands of New Mexicans impacted



**19,000 People of Color
5,800 Native Americans**



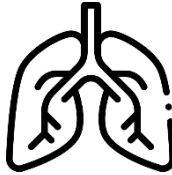
**4,500 Adults over
age 65**



**2,700 Children
under age 5**



**5,700 People in
Poverty**



**3,800 Adults
with Asthma**



**2,200 Adults with
Coronary Heart disease**



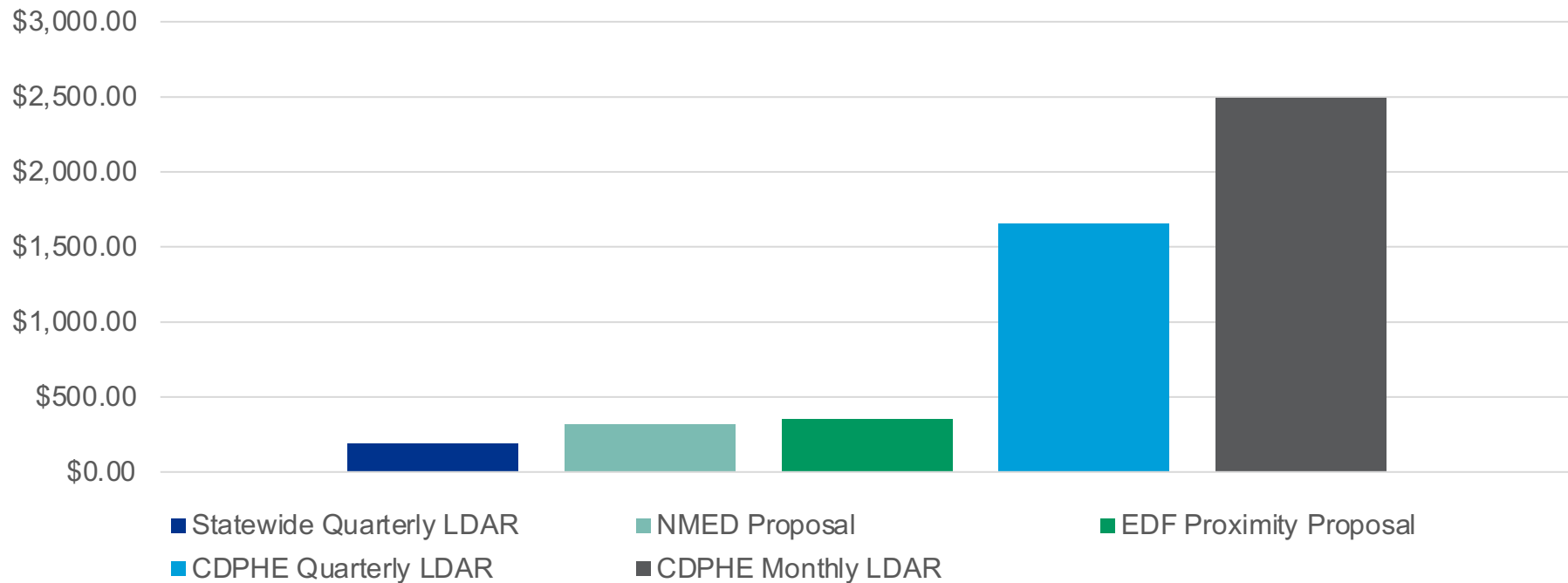
**2,600 Adults with Chronic
Obstructive Pulmonary disease**



**1,200 Adults who have had or
at risk of stroke**

EDF's Proximity-Based LDAR Proposal

Cost per ton VOC Reduced



LDAR Cost Effectiveness

NMED Has Likely Over Estimated Costs

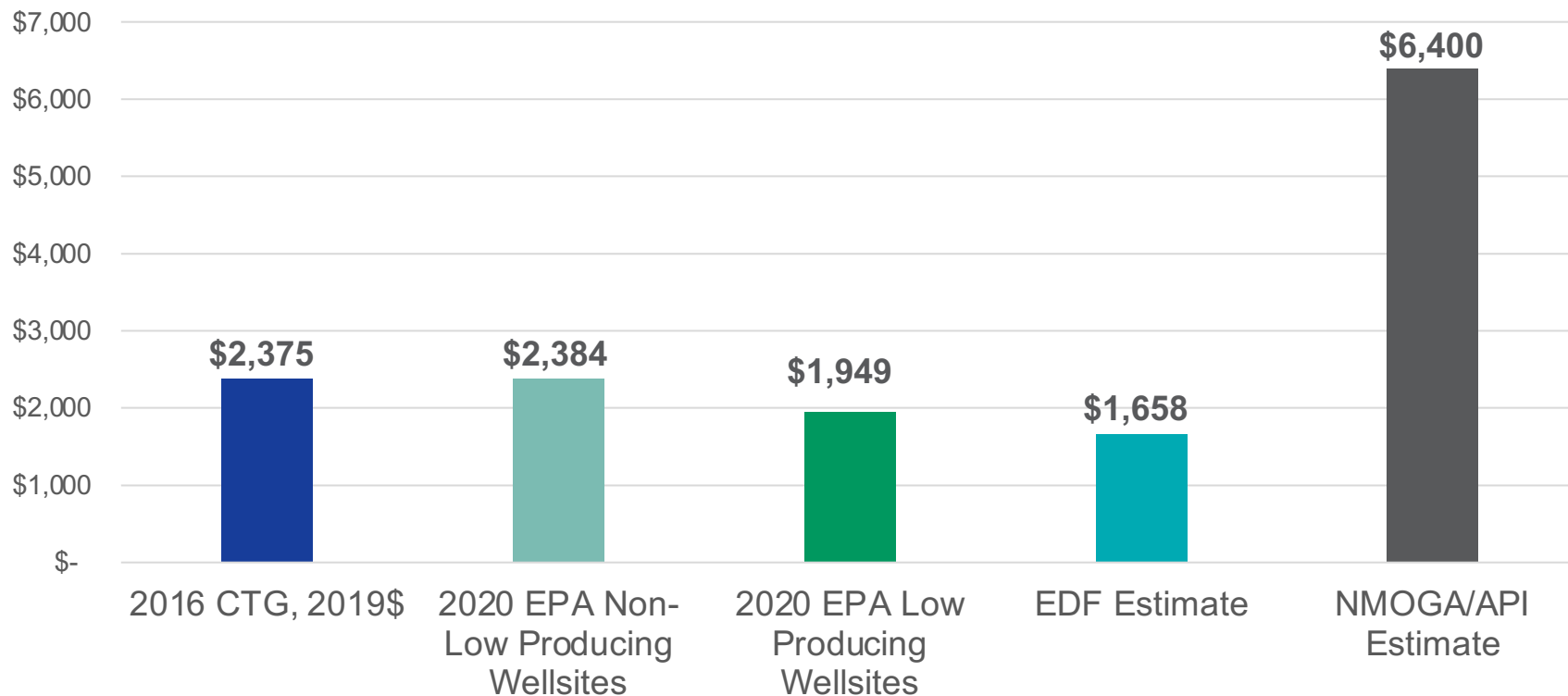
ERG Cost Effectiveness Estimates

- ERG relied on EPA's 2016 Control Techniques Guidelines to estimate the costs
- 2020 EPA estimated costs are **lower** than ERG's
- A 2018 MJ Bradley report indicates that the average time to conduct an LDAR survey is going down as operators have been implementing state and federal LDAR programs
- Rapid growth in advanced methane detection technologies is likely to significantly reduce the costs of LDAR compliance
- **We estimate NMED overestimated LDAR Costs by 30%**

NMOGA Overestimates Compliance Costs

- NMOGA cites the American Petroleum Institute's (API) December 2015 comments on the draft 2016 CTGs
 - Increased the EPA estimate from \$2,230 per well site to over \$6,400 per site.
 - This was notably rejected by EPA in their 2016 CTGs.
 - Costs are significantly higher than recent EPA estimates as well as ERG's estimates, and 286% higher than EDF estimate.
- API assumes all operators create their own in-house LDAR survey program
 - CO's 2014 LDAR program assumed operators with <500 wells would hire 3rd party contractors

OGI Semi-annual LDAR Cost/Site



NMOGA LDAR Proposal

NMOGA's Less Protective Well Site LDAR Proposal

LDAR Frequency	NMED Proposed Tiers	NMOGA Proposed Tiers
Annually	Less than 2 TPY VOC	Less than 10 TPY VOC
Semi-annually	2 TPY VOC to less than 5	10 TPY VOC to less than 25
Quarterly	5 TPY VOC or greater	25 TPY VOC or greater

EDF estimates NMOGA's proposal would result in 23,000 additional tons of VOCs and 79,000 additional tons CH₄

NMOGA's Less Protective G&B Site LDAR Proposal

Potential to Emit	NMED Proposed Frequency	NMOGA Proposed Frequency
Less than 25 TPY VOC	Quarterly	Semi-Annually
25 TPY VOC or greater	Monthly	Quarterly

EDF estimates NMOGA's proposal would result in 8,400 additional tons of VOCs and 34,000 additional tons CH₄

Thank you!

Surrebuttal

Joint Proposal for increased inspections at Transmission Compressor Stations

- EDF & Kinder Morgan jointly propose a minimum LDAR frequency for transmission compressor stations in compliance with federal requirements
 - Currently quarterly monitoring is required
 - Monitoring shall comply with any increased stringency of the New Source Performance Standards, 40 C.F.R. Part 60